

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

20. (Currently Amended): A rheopectic abrasive visco-elastic medium composition for abrasive working of a work piece comprising: A. a visco-elastic poly(boro-siloxane) polymer carrier having a static viscosity of from about  $\eta = 5 \times 10^3$  Centipoise to about  $\eta = 5 \times 10^5$  Centipoise; B. a particulate abrasive; C. an optional inert filler in an amount of up to about 25% by weight of said medium; an optional plasticizing lubricant for said visco-elastic polymer in an amount of up to about 25% by weight of said medium; E. said medium having a static viscosity of from about  $\eta = 2 \times 10^4$  Centipoise to about  $\eta = 8 \times 10^6$  Centipoise, said medium containing a total volume of said particulate abrasive and of said inert filler is-less than a the critical particulate solids volume concentration of said medium; and F. thesaid resulting visco-elastic abrasive medium having from 50% to about 99% of the deflection by elastic deformation, and 1 to 50% of the deflection of the medium by fluid or plastic flow, when subjected to applied strain rates greater than about  $2.5 \text{ sec}^{-1}$ .

21. (Currently Amended): The medium composition of Claim 20 wherein said visco-elastic particulate abrasive comprises is-a material selected from the group consisting of alumina, silica, garnet, silicon carbide, diamond, tungsten carbide and mixtures thereof.

22. (Currently Amended): The medium composition of claim 20 wherein said particulate abrasive further comprises particles which range from about 1 to about 2000 micrometers in their greatest dimension.